

TOPzS

Technical Data

BATTERIES



SOLAR PV



WIND



GENSET



GRID

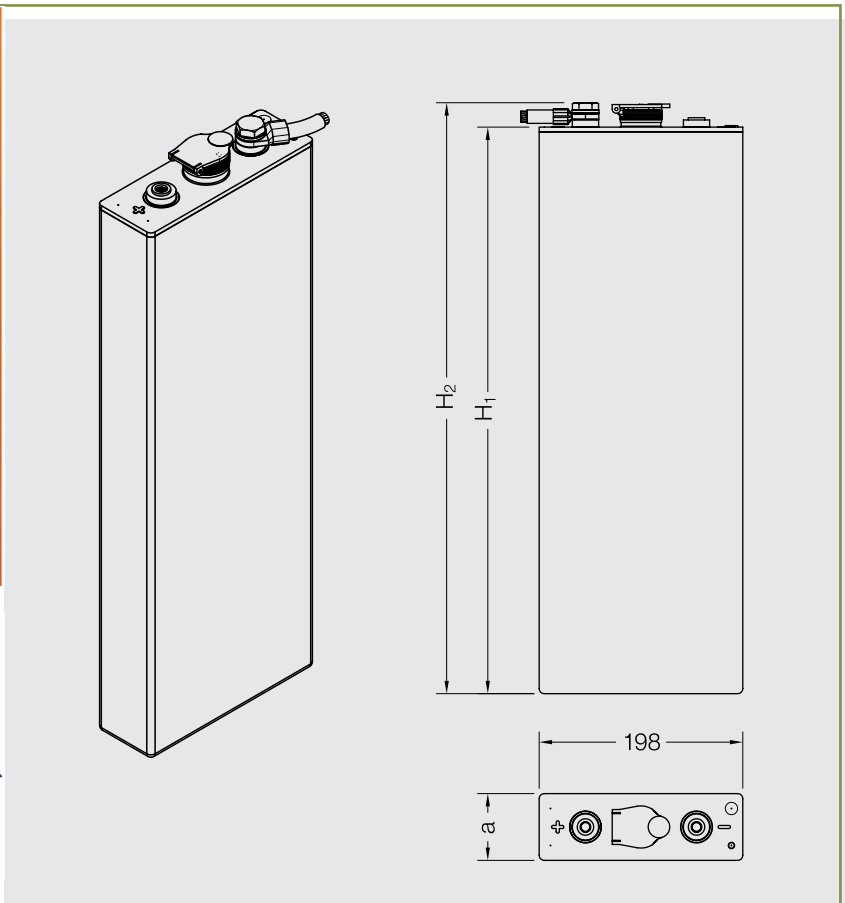


Product Range

2V Cell Type	Capacity (Ah at 20°C)				Length (mm)	Dimensions			Weight		Internal Resistance (mOhm)	Short Circuit Current (A)
	C100 Uf=1.85V	C48 Uf=1.80V	C24 Uf=1.80V	C10 Uf=1.70V		Width (mm)	Height ₁ (mm)	Height ₂ (mm)	Dry (kg)	Wet (kg)		
2 TOPzS 150	208	199	177	150	198	65	408	435	7.4	11.5	1.75	1160
3 TOPzS 210	273	288	257	210	198	83	408	435	10.0	15.4	1.19	1700
3 TOPzS 270	351	365	326	270	198	83	478	505	12.1	18.4	1.02	1980
4 TOPzS 360	468	470	420	360	198	101	478	505	15.4	23.3	0.78	2590
5 TOPzS 442	574	567	508	442	198	119	478	505	18.7	28.0	0.64	3170
4 TOPzS 500	650	688	620	500	198	101	613	640	21.0	30.5	0.63	3190
5 TOPzS 625	812	823	744	625	198	119	613	640	25.6	36.9	0.52	3890
6 TOPzS 750	975	933	846	750	198	137	613	640	30.2	43.4	0.44	4560
7 TOPzS 875	1137	1206	1084	875	198	174	613	640	35.0	51.6	0.39	5190
8 TOPzS 1000	1300	1318	1188	1000	198	192	613	640	39.6	58.1	0.35	5790

Technical details may be subject to alterations.

Drawings



Technical Features

Design

Positive plates	Tubular plates with special low-antimony lead alloy ($\leq 1.65\%$ Sb).
Negative plates	Pasted negative plates of grid design with optimized low-antimony lead alloy.
Separators	Low resistance, microporous PVC.
Electrolyte	Diluted sulphuric acid.
Container, lid material	Polypropylene (translucent for the container) with lid welding, trimming and tightness control.
Poles	Premium design with insert and rubber seal in the lid for hardness and acid resistance. M10 brass inlay. Impedance measurements possible.
Connectors	Accurate voltage measurements possible due to bolt-on type design. Steel bolts with plastic encapsulated heads. Insulated flexible connectors.
Ceramic Plugs	Flame arresting design available. Ceramic funnel plugs also available.

Operation

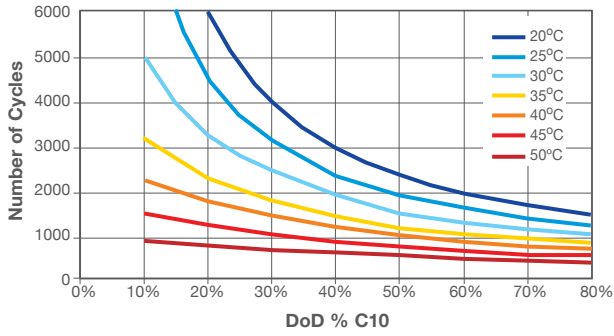
Number of cycles	2000 cycles for 60% DoD at 20°C.
Design life	18 years (stand-by float, 20°C).
Maintenance	Low topping up requirements due to large container and special low-antimony lead alloy plates.
Operating temperature	Recommended 15°C to 35°C. Max: 50°C.
Storage Time	Maximum shelf life up to 3 months at 20°C, 2 months at 30°C or 1 month at 40°C.
Self discharge rate	Approx. 2.5% per month at 20°C.

Certified Quality

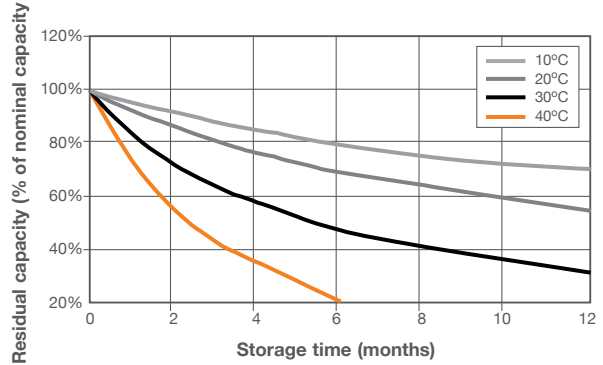
- Manufactured at European production facilities, certified with ISO 9001, ISO 14001, BS OHSAS 18001
- Compliant with IEC 61427 requirements for photovoltaic energy systems
- “Long Life” according to Eurobat classification
- Fully compliant with IEC 60896-11 requirements for vented lead-acid batteries
- Compliant with the safety requirements of EN 50272-2 for stationary batteries

Performance Curves

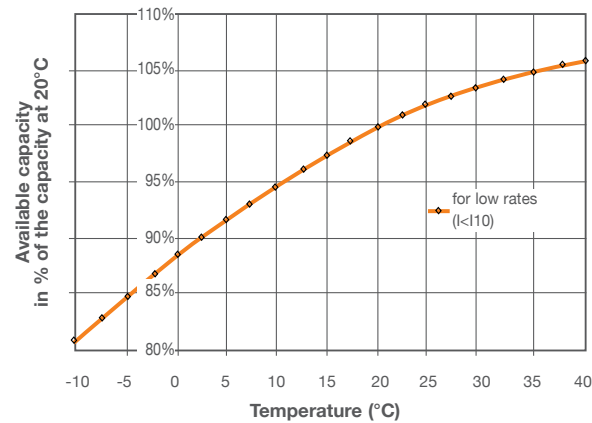
Expected Number of Cycles vs. DoD



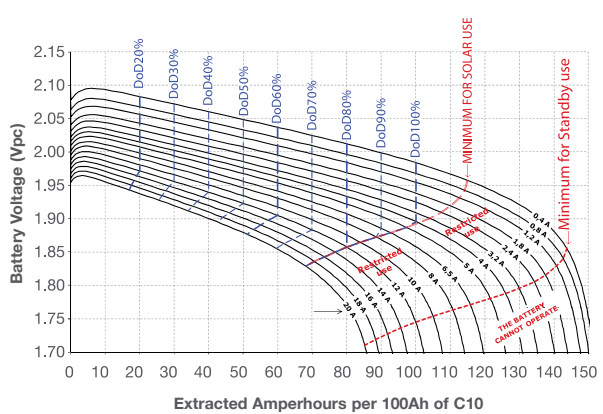
Self-discharge Characteristics



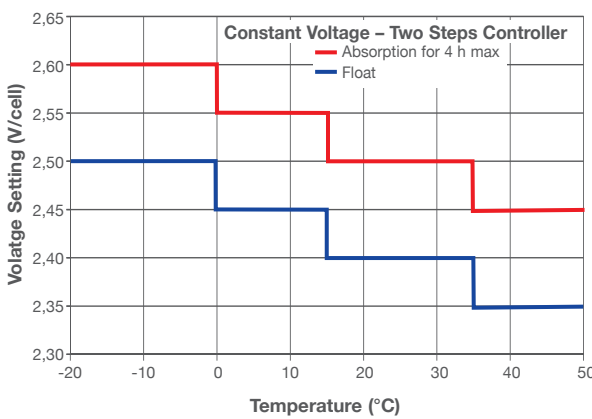
Capacity vs. Temperature



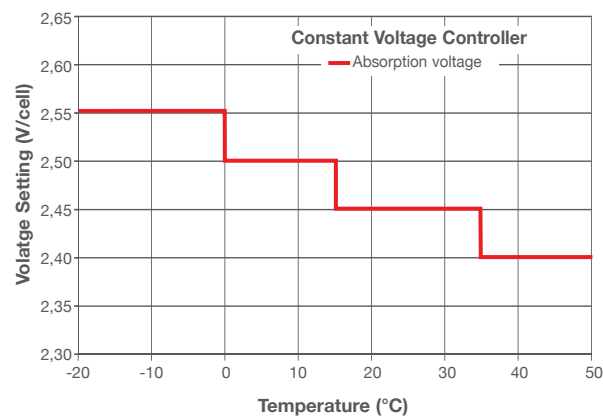
Low-voltage Disconnect Settings



Charging Settings for Stand-alone Systems



Charging Settings for Hybrid Systems



Performance Data

Discharge Constant Current at 20°C (Amperes)

End Voltage 1.60 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	73.64	47.66	36.40	29.87	25.52	22.38	20.00	18.12	15.33	13.34	10.67	8.94
3 TOPzS 210	108.92	70.23	53.52	43.84	37.41	32.78	29.27	26.50	22.40	19.47	15.55	13.01
3 TOPzS 265	139.39	89.87	68.43	56.03	47.78	41.84	37.35	33.81	28.55	24.82	19.80	16.56
4 TOPzS 360	183.29	117.76	89.46	73.12	62.28	54.49	48.59	43.95	37.08	32.19	25.65	21.43
5 TOPzS 442	226.11	144.66	109.60	89.43	76.04	66.46	59.21	53.52	45.09	39.11	31.11	25.96
4 TOPzS 500	274.93	177.10	134.45	109.84	93.55	81.82	72.92	65.91	55.51	48.12	38.23	31.86
5 TOPzS 625	337.92	216.75	164.06	133.75	113.72	99.32	88.41	79.83	67.13	58.12	46.09	38.35
6 TOPzS 750	396.80	253.15	190.89	155.21	131.67	114.79	102.04	92.02	77.22	66.75	52.80	43.86
7 TOPzS 875	478.63	309.47	235.10	192.13	163.66	143.15	127.59	115.32	97.13	84.21	66.91	55.76
8 TOPzS 1000	537.36	346.13	262.19	213.82	181.82	158.82	141.39	127.67	107.37	92.96	73.73	61.36

End Voltage 1.65 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	72.77	47.27	36.14	29.67	25.36	22.24	19.88	18.02	15.24	13.27	10.61	8.89
3 TOPzS 210	107.54	69.64	53.12	43.54	37.16	32.57	29.08	26.33	22.26	19.35	15.45	12.93
3 TOPzS 265	137.24	89.01	67.87	55.61	47.44	41.56	37.10	33.59	28.37	24.66	19.68	16.46
4 TOPzS 360	180.21	116.57	88.69	72.55	61.81	54.09	48.25	43.65	36.83	31.98	25.49	21.29
5 TOPzS 442	222.15	143.16	108.64	88.71	75.46	65.97	58.79	53.14	44.78	38.85	30.91	25.79
4 TOPzS 500	267.55	174.83	133.09	108.86	92.77	81.17	72.36	65.41	55.10	47.77	37.97	31.64
5 TOPzS 625	328.36	213.86	162.36	132.53	112.74	98.51	87.72	79.22	66.63	57.70	45.76	38.09
6 TOPzS 750	384.67	249.56	188.80	153.72	130.48	113.81	101.19	91.28	76.62	66.24	52.41	43.55
7 TOPzS 875	463.56	305.14	232.60	190.35	162.25	141.98	126.58	114.44	96.42	83.60	66.44	55.39
8 TOPzS 1000	519.29	341.03	259.28	211.76	180.20	157.48	140.24	126.67	106.55	92.27	73.20	60.93

End Voltage 1.70 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	71.20	46.67	35.76	29.38	25.13	22.05	19.71	17.87	15.12	13.16	10.53	8.82
3 TOPzS 210	105.02	68.69	52.52	43.10	36.80	32.26	28.82	26.10	22.07	19.19	15.33	12.83
3 TOPzS 265	133.16	87.61	67.02	54.99	46.94	41.14	36.74	33.27	28.11	24.44	19.51	16.32
4 TOPzS 360	174.33	114.58	87.50	71.69	61.12	53.52	47.76	43.22	36.48	31.68	25.26	21.10
5 TOPzS 442	214.60	140.63	107.14	87.62	74.60	65.25	58.18	52.60	44.34	38.48	30.62	25.56
4 TOPzS 500	254.20	170.72	130.85	107.32	91.58	80.19	71.53	64.69	54.52	47.29	37.60	31.34
5 TOPzS 625	311.34	208.61	159.51	130.58	111.24	97.28	86.67	78.31	65.90	57.09	45.30	37.72
6 TOPzS 750	363.43	242.94	185.26	151.31	128.64	112.31	99.92	90.18	75.74	65.51	51.86	43.10
7 TOPzS 875	437.68	297.13	228.38	187.49	160.07	140.21	125.08	113.14	95.38	82.74	65.79	54.86
8 TOPzS 1000	489.01	331.54	254.32	208.43	177.66	155.42	138.51	125.16	105.35	91.28	72.45	60.32

Performance Data

Discharge Constant Current at 20°C (Amperes)

End Voltage 1.75 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	68.13	45.57	35.10	28.91	24.76	21.74	19.45	17.63	14.93	13.00	10.41	8.72
3 TOPzS 210	100.14	66.91	51.48	42.35	36.22	31.78	28.41	25.74	21.78	18.95	15.14	12.67
3 TOPzS 265	125.70	84.87	65.46	53.90	46.10	40.46	36.16	32.76	27.71	24.10	19.25	16.11
4 TOPzS 360	163.85	110.64	85.27	70.14	59.93	52.55	46.94	42.51	35.91	31.21	24.90	20.82
5 TOPzS 442	201.35	135.63	104.32	85.67	73.10	64.04	57.15	51.71	43.64	37.89	30.18	25.20
4 TOPzS 500	234.13	162.56	126.42	104.39	89.39	78.46	70.08	63.45	53.55	46.49	37.01	30.87
5 TOPzS 625	286.10	198.23	153.86	126.85	108.48	95.09	84.85	76.75	64.69	56.09	44.57	37.13
6 TOPzS 750	332.66	230.04	178.18	146.63	125.18	109.58	97.66	88.24	74.24	64.28	50.96	42.39
7 TOPzS 875	400.59	281.59	219.94	181.99	156.02	137.02	122.45	110.89	93.64	81.31	64.74	54.03
8 TOPzS 1000	446.23	313.29	244.36	201.94	172.90	151.68	135.42	122.54	103.33	89.62	71.24	59.37

End Voltage 1.80 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	21.15	18.95	17.20	14.59	12.72	7.38	4.15	2.92	2.18	1.85	1.36	0.97
3 TOPzS 210	30.83	27.61	25.05	21.23	18.49	10.71	6.00	4.22	3.15	2.67	1.96	1.40
3 TOPzS 265	39.06	34.99	31.76	26.92	23.46	13.58	7.61	5.35	3.99	3.38	2.48	1.77
4 TOPzS 360	50.55	45.26	41.07	34.79	30.29	17.50	9.79	6.88	5.13	4.34	3.18	2.27
5 TOPzS 442	61.51	55.04	49.90	42.22	36.73	21.15	11.81	8.28	6.17	5.23	3.82	2.73
4 TOPzS 500	74.76	67.02	60.85	51.56	44.88	25.82	14.33	9.99	7.38	6.23	4.52	3.20
5 TOPzS 625	90.42	80.98	73.46	62.17	54.06	30.99	17.15	11.93	8.81	7.42	5.39	3.81
6 TOPzS 750	103.76	92.84	84.13	71.09	61.74	35.25	19.44	13.49	9.95	8.38	6.07	4.29
7 TOPzS 875	130.22	116.84	106.14	90.02	78.40	45.18	25.12	17.52	12.96	10.93	7.94	5.63
8 TOPzS 1000	143.72	128.85	116.96	99.08	86.20	49.52	27.45	19.11	14.12	11.90	8.64	6.11

End Voltage 1.85 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	19.85	17.84	16.24	13.83	12.09	7.07	4.00	2.82	2.11	1.79	1.32	0.94
3 TOPzS 210	28.77	25.85	23.52	20.01	17.48	10.21	5.77	4.07	3.04	2.58	1.90	1.36
3 TOPzS 265	36.14	32.49	29.58	25.19	22.01	12.87	7.28	5.14	3.85	3.27	2.40	1.72
4 TOPzS 360	46.47	41.76	38.00	32.34	28.25	16.50	9.34	6.59	4.94	4.19	3.08	2.21
5 TOPzS 442	56.43	50.67	46.08	39.16	34.18	19.91	11.25	7.94	5.94	5.04	3.70	2.65
4 TOPzS 500	67.79	61.04	55.61	47.39	41.42	24.17	13.61	9.56	7.11	6.01	4.38	3.11
5 TOPzS 625	81.74	73.54	66.95	56.97	49.74	28.95	16.28	11.42	8.48	7.17	5.22	3.71
6 TOPzS 750	93.24	83.79	76.21	64.76	56.48	32.76	18.38	12.88	9.56	8.08	5.88	4.17
7 TOPzS 875	117.69	106.10	96.75	82.54	72.22	42.30	23.91	16.82	12.52	10.59	7.73	5.49
8 TOPzS 1000	129.34	116.51	106.17	90.48	79.09	46.20	26.07	18.32	13.62	11.52	8.40	5.96

Performance Data

Discharge Constant Current at 20°C (Amperes)

End Voltage 1.90 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	17.49	15.78	14.41	12.33	10.82	6.40	3.66	2.60	1.95	1.66	1.23	0.88
3 TOPzS 210	25.13	22.67	20.69	17.69	15.50	9.16	5.24	3.73	2.80	2.39	1.76	1.27
3 TOPzS 265	31.16	28.15	25.71	22.02	19.32	11.46	6.57	4.68	3.53	3.00	2.22	1.60
4 TOPzS 360	39.66	35.82	32.71	28.00	24.56	14.57	8.38	5.98	4.51	3.85	2.85	2.05
5 TOPzS 442	48.04	43.35	39.56	33.82	29.65	17.56	10.10	7.21	5.44	4.63	3.43	2.47
4 TOPzS 500	56.71	51.36	47.01	40.35	35.47	21.14	12.17	8.65	6.50	5.52	4.07	2.91
5 TOPzS 625	68.13	61.65	56.38	48.34	42.46	25.26	14.54	10.34	7.77	6.60	4.85	3.47
6 TOPzS 750	77.00	69.60	63.61	54.48	47.81	28.41	16.35	11.62	8.72	7.41	5.45	3.89
7 TOPzS 875	98.07	88.96	81.53	70.12	61.74	37.03	21.48	15.34	11.55	9.83	7.25	5.19
8 TOPzS 1000	107.15	97.11	88.95	76.43	67.24	40.28	23.34	16.66	12.54	10.67	7.86	5.63

End Voltage 1.94 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	14.57	13.21	12.10	10.41	9.17	5.50	3.19	2.28	1.72	1.47	1.09	0.79
3 TOPzS 210	20.72	18.77	17.19	14.78	13.01	7.81	4.54	3.26	2.47	2.11	1.57	1.13
3 TOPzS 265	25.33	22.98	21.07	18.15	16.00	9.67	5.66	4.07	3.09	2.64	1.96	1.42
4 TOPzS 360	31.86	28.90	26.49	22.82	20.13	12.21	7.19	5.19	3.95	3.38	2.52	1.83
5 TOPzS 442	38.53	34.92	31.99	27.53	24.27	14.72	8.68	6.27	4.77	4.09	3.05	2.21
4 TOPzS 500	44.68	40.67	37.39	32.34	28.62	17.54	10.40	7.51	5.70	4.88	3.62	2.61
5 TOPzS 625	53.53	48.68	44.73	38.66	34.20	20.98	12.45	9.00	6.83	5.84	4.34	3.13
6 TOPzS 750	59.94	54.47	50.02	43.22	38.22	23.48	13.95	10.08	7.66	6.54	4.86	3.50
7 TOPzS 875	77.11	70.32	64.76	56.18	49.84	30.89	18.53	13.46	10.27	8.80	6.55	4.74
8 TOPzS 1000	83.80	76.37	70.29	60.94	54.05	33.51	20.10	14.59	11.12	9.52	7.08	5.12

End Voltage 2.00 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	8.59	7.84	7.23	6.29	5.59	3.49	2.09	1.52	1.16	0.99	0.74	0.54
3 TOPzS 210	11.98	10.94	10.10	8.80	7.83	4.93	2.99	2.18	1.68	1.44	1.07	0.78
3 TOPzS 265	14.22	13.02	12.05	10.55	9.43	6.01	3.69	2.71	2.09	1.79	1.33	0.96
4 TOPzS 360	17.50	16.07	14.90	13.08	11.73	7.59	4.70	3.49	2.69	2.32	1.73	1.24
5 TOPzS 442	21.27	19.53	18.11	15.92	14.28	9.26	5.76	4.27	3.29	2.85	2.12	1.51
4 TOPzS 500	23.92	22.11	20.61	18.26	16.49	10.91	6.87	5.13	3.96	3.41	2.54	1.83
5 TOPzS 625	28.78	26.61	24.83	22.02	19.91	13.20	8.33	6.21	4.80	4.15	3.09	2.20
6 TOPzS 750	31.85	29.49	27.54	24.48	22.17	14.76	9.34	6.92	5.35	4.65	3.48	2.42
7 TOPzS 875	41.75	38.73	36.24	32.30	29.31	19.76	12.69	9.52	7.45	6.40	4.81	3.54
8 TOPzS 1000	45.20	41.96	39.27	35.02	31.81	21.45	13.74	10.35	8.04	6.92	5.17	3.73

Performance Data

Discharge Constant Power at 20°C (Watts/cell)

End Voltage 1.60 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	127.79	85.44	66.25	54.89	47.21	41.62	37.34	33.95	28.87	25.23	20.30	17.08
3 TOPzS 210	188.58	125.64	97.21	80.40	69.06	60.82	54.53	49.54	42.08	36.74	29.51	24.80
3 TOPzS 265	239.18	159.74	123.63	102.25	87.82	77.33	69.31	62.96	53.47	46.67	37.47	31.49
4 TOPzS 360	313.59	208.78	161.23	133.14	114.19	100.45	89.97	81.67	69.27	60.40	48.43	40.65
5 TOPzS 442	386.50	256.34	197.46	162.77	139.39	122.47	109.59	99.40	84.21	73.35	58.73	49.24
4 TOPzS 500	461.50	310.02	239.92	198.31	170.26	149.82	134.16	121.74	103.16	89.85	71.89	60.22
5 TOPzS 625	566.48	379.11	292.55	241.32	206.84	181.76	162.58	147.38	124.69	108.47	86.62	72.46
6 TOPzS 750	663.70	441.95	339.81	279.56	239.09	209.72	187.32	169.59	143.19	124.36	99.07	82.73
7 TOPzS 875	798.09	539.38	418.16	345.94	297.18	261.61	234.35	212.70	180.30	157.08	125.73	105.35
8 TOPzS 1000	894.39	602.45	465.76	384.56	329.81	289.92	259.42	235.22	199.07	173.22	138.38	115.80

End Voltage 1.65 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	126.51	84.86	65.86	54.58	46.96	41.40	37.15	33.78	28.73	25.11	20.20	17.00
3 TOPzS 210	186.54	124.75	96.61	79.94	68.68	60.49	54.24	49.28	41.87	36.55	29.37	24.68
3 TOPzS 265	236.04	158.46	122.79	101.61	87.29	76.88	68.92	62.62	53.19	46.42	37.28	31.33
4 TOPzS 360	309.09	206.99	160.08	132.27	113.48	99.84	89.44	81.20	68.89	60.07	48.18	40.44
5 TOPzS 442	380.72	254.09	196.01	161.67	138.50	121.72	108.94	98.82	83.73	72.94	58.41	48.97
4 TOPzS 500	451.07	306.62	237.87	196.82	169.07	148.82	133.30	120.98	102.54	89.32	71.48	59.88
5 TOPzS 625	553.03	374.77	289.98	239.45	205.35	180.51	161.50	146.43	123.92	107.81	86.11	72.05
6 TOPzS 750	646.70	436.57	336.64	277.28	237.27	208.21	186.01	168.45	142.26	123.57	98.47	82.24
7 TOPzS 875	777.30	532.91	414.37	343.24	295.04	259.82	232.80	211.33	179.19	156.14	125.00	104.75
8 TOPzS 1000	869.56	594.81	461.37	381.43	327.33	287.87	257.64	233.66	197.81	172.15	137.56	115.12

End Voltage 1.70 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	124.16	83.93	65.27	54.13	46.60	41.09	36.88	33.54	28.54	24.94	20.07	16.89
3 TOPzS 210	182.78	123.28	95.68	79.24	68.11	60.02	53.82	48.91	41.57	36.30	29.17	24.52
3 TOPzS 265	230.04	156.28	121.46	100.63	86.51	76.22	68.36	62.11	52.78	46.08	37.01	31.10
4 TOPzS 360	300.50	203.91	158.21	130.90	112.39	98.94	88.65	80.51	68.33	59.60	47.81	40.14
5 TOPzS 442	369.72	250.17	193.66	159.95	137.14	120.59	107.96	97.96	83.03	72.35	57.95	48.60
4 TOPzS 500	432.73	300.29	234.36	194.38	167.18	147.26	131.98	119.82	101.61	88.54	70.88	59.40
5 TOPzS 625	529.66	366.69	285.51	236.38	202.97	178.56	159.84	144.98	122.76	106.84	85.38	71.45
6 TOPzS 750	617.69	426.38	331.08	273.47	234.34	205.82	183.99	166.68	140.85	122.40	97.58	81.52
7 TOPzS 875	742.42	520.65	407.78	338.73	291.58	257.00	230.41	209.25	177.53	154.75	123.94	103.90
8 TOPzS 1000	828.96	580.30	453.59	376.17	323.30	284.60	254.88	231.26	195.90	170.55	136.35	114.15

Performance Data

Discharge Constant Power at 20°C (Watts/cell)

End Voltage 1.75 V/cell												
	1 h	2 h	3 h	4 h	5 h	6 h	7 h	8 h	10 h	12 h	16 h	20 h
2 TOPzS 150	119.60	82.17	64.21	53.37	45.99	40.59	36.45	33.16	28.23	24.68	19.87	16.72
3 TOPzS 210	175.57	120.45	93.99	78.03	67.16	59.22	53.14	48.32	41.08	35.89	28.85	24.26
3 TOPzS 265	219.29	151.96	118.94	98.87	85.14	75.10	67.40	61.28	52.11	45.51	36.58	30.75
4 TOPzS 360	285.43	197.71	154.61	128.38	110.45	97.35	87.31	79.33	67.39	58.81	47.21	39.65
5 TOPzS 442	350.71	242.29	189.10	156.77	134.68	118.59	106.27	96.49	81.86	71.37	57.21	48.00
4 TOPzS 500	404.93	287.82	227.27	189.63	163.61	144.42	129.60	117.78	100.01	87.22	69.90	58.62
5 TOPzS 625	494.72	350.86	276.50	230.33	198.44	174.95	156.84	142.41	120.75	105.18	84.15	70.48
6 TOPzS 750	575.00	406.75	319.80	265.88	228.68	201.32	180.25	163.49	138.37	120.36	96.08	80.34
7 TOPzS 875	691.58	497.16	394.37	329.83	284.97	251.77	226.07	205.55	174.64	152.38	122.20	102.52
8 TOPzS 1000	770.20	552.83	437.81	365.66	315.53	278.45	249.80	226.92	192.54	167.80	134.33	112.56

End Voltage 1.80 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	21.15	18.95	17.20	14.59	12.72	7.38	4.15	2.92	2.18	1.85	1.36	0.97
3 TOPzS 210	30.83	27.61	25.05	21.23	18.49	10.71	6.00	4.22	3.15	2.67	1.96	1.40
3 TOPzS 265	39.06	34.99	31.76	26.92	23.46	13.58	7.61	5.35	3.99	3.38	2.48	1.77
4 TOPzS 360	50.55	45.26	41.07	34.79	30.29	17.50	9.79	6.88	5.13	4.34	3.18	2.27
5 TOPzS 442	61.51	55.04	49.90	42.22	36.73	21.15	11.81	8.28	6.17	5.23	3.82	2.73
4 TOPzS 500	74.76	67.02	60.85	51.56	44.88	25.82	14.33	9.99	7.38	6.23	4.52	3.20
5 TOPzS 625	90.42	80.98	73.46	62.17	54.06	30.99	17.15	11.93	8.81	7.42	5.39	3.81
6 TOPzS 750	103.76	92.84	84.13	71.09	61.74	35.25	19.44	13.49	9.95	8.38	6.07	4.29
7 TOPzS 875	130.22	116.84	106.14	90.02	78.40	45.18	25.12	17.52	12.96	10.93	7.94	5.63
8 TOPzS 1000	143.72	128.85	116.96	99.08	86.20	49.52	27.45	19.11	14.12	11.90	8.64	6.11

End Voltage 1.85 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	37.37	33.71	30.77	26.32	23.09	13.69	7.84	5.57	4.19	3.57	2.64	1.90
3 TOPzS 210	54.10	48.76	44.49	38.03	33.34	19.73	11.29	8.03	6.04	5.14	3.80	2.74
3 TOPzS 265	67.77	61.15	55.82	47.76	41.89	24.83	14.23	10.13	7.63	6.50	4.80	3.46
4 TOPzS 360	87.04	78.49	71.62	61.23	53.68	31.78	18.23	12.98	9.78	8.33	6.16	4.44
5 TOPzS 442	105.70	95.24	86.84	74.15	64.96	38.36	21.97	15.64	11.78	10.03	7.42	5.34
4 TOPzS 500	126.50	114.30	104.44	89.43	78.47	46.46	26.55	18.81	14.09	11.96	8.79	6.29
5 TOPzS 625	152.55	137.71	125.73	107.50	94.23	55.64	31.76	22.48	16.83	14.28	10.49	7.50
6 TOPzS 750	173.90	156.81	143.04	122.12	106.92	62.92	35.85	25.35	18.96	16.09	11.80	8.43
7 TOPzS 875	219.42	198.50	181.54	155.65	136.72	81.27	46.68	33.16	24.89	21.15	15.55	11.14
8 TOPzS 1000	241.08	217.91	199.15	170.55	149.67	88.73	50.88	36.11	27.07	22.99	16.90	12.09

Performance Data

Discharge Constant Power at 20°C (Watts/cell)

End Voltage 1.90 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	33.25	30.10	27.55	23.67	20.83	12.47	7.21	5.15	3.89	3.32	2.47	1.78
3 TOPzS 210	47.75	43.20	39.52	33.92	29.83	17.84	10.33	7.39	5.60	4.78	3.55	2.57
3 TOPzS 265	59.13	53.55	49.04	42.15	37.11	22.27	12.94	9.28	7.03	6.01	4.47	3.24
4 TOPzS 360	75.22	68.10	62.34	53.56	47.13	28.30	16.49	11.86	9.00	7.70	5.73	4.15
5 TOPzS 442	91.13	82.44	75.41	64.71	56.90	34.12	19.88	14.29	10.85	9.28	6.91	5.01
4 TOPzS 500	107.37	97.48	89.42	77.05	67.94	40.99	23.91	17.15	12.97	11.06	8.20	5.91
5 TOPzS 625	129.00	117.01	107.26	92.30	81.33	49.00	28.60	20.51	15.51	13.23	9.80	7.06
6 TOPzS 750	145.78	132.09	120.98	103.99	91.54	55.09	32.15	23.05	17.42	14.86	11.00	7.92
7 TOPzS 875	185.60	168.76	155.01	133.82	118.19	71.81	42.25	30.45	23.11	19.74	14.67	10.58
8 TOPzS 1000	202.77	184.23	169.10	145.84	128.71	78.09	45.92	33.07	25.08	21.42	15.90	11.46

End Voltage 1.94 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	28.05	25.48	23.39	20.19	17.83	10.81	6.33	4.55	3.46	2.96	2.21	1.60
3 TOPzS 210	39.89	36.21	33.22	28.64	25.29	15.35	9.02	6.51	4.96	4.25	3.18	2.31
3 TOPzS 265	48.71	44.28	40.67	35.14	31.07	18.97	11.22	8.13	6.21	5.32	3.98	2.90
4 TOPzS 360	61.27	55.67	51.13	44.17	39.05	23.94	14.26	10.37	7.94	6.82	5.11	3.73
5 TOPzS 442	74.10	67.28	61.75	53.30	47.11	28.87	17.22	12.54	9.60	8.25	6.18	4.51
4 TOPzS 500	85.88	78.29	72.09	62.54	55.47	34.36	20.62	15.01	11.47	9.84	7.35	5.34
5 TOPzS 625	102.89	93.73	86.26	74.76	66.30	41.10	24.71	17.99	13.76	11.80	8.82	6.41
6 TOPzS 750	115.20	104.86	96.45	83.55	74.08	45.99	27.68	20.16	15.42	13.22	9.88	7.17
7 TOPzS 875	148.18	135.35	124.84	108.60	96.57	60.50	36.77	26.94	20.69	17.79	13.33	9.71
8 TOPzS 1000	161.05	146.99	135.51	117.80	104.73	65.61	39.88	29.21	22.41	19.26	14.43	10.50

End Voltage 2.00 V/cell												
	6 h	7 h	8 h	10 h	12 h	24 h	48 h	72 h	100 h	120 h	168 h	240 h
2 TOPzS 150	16.92	15.47	14.28	12.45	11.09	6.97	4.22	3.09	2.37	2.03	1.52	1.12
3 TOPzS 210	23.59	21.58	19.93	17.40	15.52	9.85	6.03	4.44	3.43	2.94	2.20	1.61
3 TOPzS 265	27.99	25.67	23.78	20.85	18.67	12.00	7.42	5.49	4.28	3.65	2.74	1.99
4 TOPzS 360	34.42	31.64	29.36	25.83	23.21	15.13	9.50	7.09	5.50	4.74	3.56	2.58
5 TOPzS 442	41.83	38.44	35.69	31.42	28.25	18.48	11.62	8.69	6.74	5.82	4.36	3.15
4 TOPzS 500	47.00	43.48	40.57	36.02	32.60	21.76	13.87	10.41	8.11	6.98	5.24	3.80
5 TOPzS 625	56.53	52.33	48.85	43.42	39.32	26.33	16.81	12.64	9.82	8.50	6.36	4.57
6 TOPzS 750	62.51	57.93	54.16	48.23	43.76	29.43	18.82	14.07	10.93	9.58	7.15	5.02
7 TOPzS 875	81.99	76.14	71.29	63.67	57.88	39.37	25.57	19.33	15.20	13.13	9.94	7.40
8 TOPzS 1000	88.72	82.43	77.22	69.02	62.78	42.76	27.75	20.99	16.49	14.18	10.68	7.79